



## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

[EPA-R06-OAR-2021-0032; FRL-8688-01-R6]

#### Air Plan Approval; Oklahoma; Interstate Visibility Transport

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** Pursuant to the Federal Clean Air Act (CAA or the Act), the Environmental Protection Agency (EPA) is proposing to approve elements of a State Implementation Plan (SIP) submission from the State of Oklahoma for the 2015 Ozone National Ambient Air Quality Standard (NAAQS), and proposing to disapprove elements of two SIP submissions for the 2010 sulfur dioxide (SO<sub>2</sub>) and the 2012 fine particulate matter (PM<sub>2.5</sub>) NAAQS. These infrastructure SIP (i-SIP) submissions address how the existing SIP provides for implementation, maintenance, and enforcement of these NAAQS. The i-SIP requirements are to ensure that the Oklahoma SIP is adequate to meet the state's responsibilities under the CAA for these NAAQS. Specifically, this proposed rule addresses the interstate visibility transport requirements of the i-SIP for the 2010 SO<sub>2</sub>, 2012 PM<sub>2.5</sub>, and 2015 Ozone NAAQS under CAA section 110(a)(2)(D)(i)(II). We are also proposing to find that the deficiencies in the Oklahoma SIP that form the basis of our proposed disapproval of the interstate visibility transport portions of the Oklahoma i-SIP submissions for the 2010 SO<sub>2</sub> and 2012 PM<sub>2.5</sub> NAAQS are remedied by the existing Federal Implementation Plan (FIP) in place for the Oklahoma Regional Haze program, and that no further federal action is required to address the proposed disapproval.

**DATES:** Comments must be received on or before [insert date 30 days after date of publication in the *Federal Register*].

**ADDRESSES:** Submit your comments, identified by Docket No. EPA-R06-OAR-2021-0032, at <https://www.regulations.gov> or via email to [medina.dayana@epa.gov](mailto:medina.dayana@epa.gov). Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, please contact Dayana Medina, 214-665-7341, [medina.dayana@epa.gov](mailto:medina.dayana@epa.gov). For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

*Docket:* The index to the docket for this action is available electronically at [www.regulations.gov](http://www.regulations.gov). While all documents in the docket are listed in the index, some information may not be publicly available due to docket file size restrictions or content (e.g., CBI).

**FOR FURTHER INFORMATION CONTACT:** Dayana Medina, EPA Region 6 Office, Regional Haze and SO<sub>2</sub> Section, 214-665-7341, [medina.dayana@epa.gov](mailto:medina.dayana@epa.gov). Out of an abundance of caution for members of the public and our staff, the EPA Region 6 office will be closed to the public to reduce the risk of transmitting COVID-19. We encourage the public to submit comments via <https://www.regulations.gov>, as there will be a delay in processing mail and no courier or hand deliveries will be accepted. Please call or e-mail the contact listed above if you need alternative access to material indexed but not provided in the docket.

**SUPPLEMENTARY INFORMATION:** Throughout this document, “we,” “us,” and “our” means the EPA.

## **I. Background**

Whenever a new or revised NAAQS is promulgated, the Clean Air Act (CAA) requires states to submit a plan for the implementation, maintenance, and enforcement of the standard, commonly referred to as infrastructure requirements. Section 110(a)(2) lists specific requirements that infrastructure SIPs, or i-SIPs, must include to adequately address such new or revised NAAQS, as applicable. Section 110(a)(2)(D)(i) includes four distinct elements related to interstate transport of air pollution, commonly referred to as prongs, that must be addressed in i-SIP submissions. The first two prongs are codified in section 110(a)(2)(D)(i)(I) and the third and fourth prongs are codified in section 110(a)(2)(D)(i)(II). These four prongs prohibit any source or type of emission activities in one state from:

- Contributing significantly to nonattainment of the NAAQS in another state (prong 1);
- Interfering with maintenance of the NAAQS in another state (prong 2);
- Interfering with measures that prevent significant deterioration of air quality in another state (prong 3); and
- Interfering with measures that protect visibility in another state (prong 4 or “visibility transport”).

We are only addressing the prong 4 element in this proposal. In an effort to assist states in complying with the i-SIP requirements, EPA issued guidance in 2013.<sup>1</sup> In the 2013 i-SIP guidance, EPA discussed its interpretation of prong 4 and its relationship to the Regional Haze program under CAA sections 169A and 169B, which require each state to address its share of emission reductions needed to meet reasonable progress goals (RPGs) for surrounding Class I areas. EPA suggested two options states may have to demonstrate that the requirements of prong

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<sup>1</sup> Stephen D. Page, Director, Office of Air Quality Planning and Standards. “Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act Section 110(a)(1) and 110(a)(2).” Memorandum to EPA Air Division Directors, Regions 1 through 10, September 13, 2013 (hereinafter “2013 i-SIP Guidance”).

4 are met. One way in which prong 4 may be satisfied for any relevant NAAQS is through confirmation in the state's i-SIP submission that it has an approved regional haze SIP that fully meets the requirements of 40 CFR 51.308 or 51.309. Alternatively, a state may demonstrate in its i-SIP submission that emissions within its jurisdiction do not interfere with other states' plans to protect visibility. The demonstration should show that the state has sufficient measures that have been approved into its SIP to prevent emissions within its jurisdiction from interfering with the visibility protection plans of other states.

#### **A. Oklahoma's Infrastructure SIP Submittals for 2010 SO<sub>2</sub>, 2012 PM<sub>2.5</sub>, and 2015**

##### **Ozone NAAQS**

EPA has regulated particulate matter (PM) since the first NAAQS for PM were published in 1971. (36 FR 8186 (April 30, 1971)). Most recently, by notice dated January 15, 2013, following a periodic review of the NAAQS for PM<sub>2.5</sub>, EPA revised the primary annual PM<sub>2.5</sub> NAAQS to 12.0 µg/m<sup>3</sup> and retained the secondary annual PM<sub>2.5</sub> standard of 15 µg/m<sup>3</sup> as well as the primary and secondary 24-hour PM<sub>2.5</sub> standards of 35 µg/m<sup>3</sup> (2012 PM<sub>2.5</sub> NAAQS<sup>2</sup>). The primary NAAQS is designed to protect human health, and the secondary NAAQS is designed to protect the public welfare. On June 16, 2016, the Oklahoma Secretary of Energy and Environment submitted a SIP revision to address most of the i-SIP elements for this revised 2012 PM<sub>2.5</sub> NAAQS. On November 21, 2016, we proposed to approve all elements included in the 2012 PM<sub>2.5</sub> i-SIP submission except for the 110(a)(2)(D)(i)(II) prong 4 portion, which we proposed to disapprove.<sup>3</sup> On June 14, 2017, we took final action to approve all elements included in this i-SIP submission, but deferred taking final action on the 110(a)(2)(D)(i)(II) prong 4 portion.<sup>4</sup> In this notice, we are once again proposing to disapprove the prong 4 visibility transport portion of the June 16, 2016 i-SIP submission for the 2012 PM<sub>2.5</sub> NAAQS.

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<sup>2</sup> 78 FR 3085 (Jan. 15, 2013).

<sup>3</sup> 81 FR 83184 (November 21, 2016).

<sup>4</sup> 82 FR 27121 (June 14, 2017).

On June 22, 2010, we revised the primary NAAQS for SO<sub>2</sub> to establish a new 1-hour standard at a level of 75 parts per billion (ppb), based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations.<sup>5</sup> On January 28, 2015, the Oklahoma Secretary of Energy and Environment submitted a SIP revision to address i-SIP elements for this revised NAAQS. On November 21, 2016, we proposed to disapprove the 110(a)(2)(D)(i)(II) prong 4 portion of the 2010 SO<sub>2</sub> i-SIP submission, but we did not finalize this disapproval.<sup>6</sup> In this notice, we are once again proposing to disapprove the prong 4 visibility transport portion of the January 28, 2015 i-SIP submission for the 2010 SO<sub>2</sub> NAAQS.

EPA has regulated ozone since 1971, when we published the first NAAQS for Photochemical Oxidants (36 FR 8186 (April 30, 1971)). Most recently, following a periodic review of the 2008 NAAQS for ozone, the EPA promulgated a revision to the ozone NAAQS in 2015 lowering the level of both the primary and secondary standards to 0.070 parts per million.<sup>7</sup> On October 25, 2018, the Oklahoma Secretary of Energy and Environment submitted a SIP revision to address i-SIP elements for this revised NAAQS. On March 30, 2020, we approved most infrastructure elements of the 2015 ozone i-SIP submission but deferred taking final action on the 110(a)(2)(D)(i)(II) prong 4 portion.<sup>8</sup>

In this notice, we refer to each of these NAAQS by the year promulgated, *e.g.*, “the 2008 ozone standard.” For more information on these standards, please visit

<https://www.epa.gov/criteria-air-pollutants>.

## **B. Regional Haze and Visibility Transport in Oklahoma**

On February 17, 2010, Oklahoma submitted a regional haze SIP (the 2010 Regional Haze SIP) to the EPA that included best available retrofit technology (BART) requirements for SO<sub>2</sub>, NO<sub>x</sub>, and PM for Oklahoma sources. On December 28, 2011, we took final action to partially

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<sup>5</sup> 75 FR 35520 (June 22, 2010).

<sup>6</sup> 81 FR 83184.

<sup>7</sup> 82 FR 65291 (Oct. 26, 2015). Additional information on the history of the NAAQS for ozone is available at <https://www.epa.gov/ozone-pollution/table-historical-ozone-national-ambient-air-quality-standards-naaqs>.

<sup>8</sup> See 85 FR 17502 (March 30, 2020).

approve and partially disapprove the 2010 Regional Haze SIP.<sup>9</sup> In this final action, we disapproved Oklahoma's SO<sub>2</sub> BART determinations for the Oklahoma Gas and Electric (OG&E) Sooner Units 1 and 2, the OG&E Muskogee Units 4 and 5, and the American Electric Power/Public Service Company of Oklahoma (AEP/PSO) Northeastern Units 3 and 4 because they do not comply with our regional haze regulations under 40 CFR 51.308(e). We approved Oklahoma's remaining SO<sub>2</sub> BART determinations as well as all nitrogen oxide (NO<sub>x</sub>) and PM BART determinations. Additionally, we approved all remaining portions of the 2010 Regional Haze SIP, with the exception of (1) the long-term strategy to the extent it relied on the BART emission limits that we disapproved and (2) Oklahoma's 2018 RPGs on the 20% least impaired and 20% most impaired days for the Wichita Mountains Class I area.<sup>10</sup>

In the December 28, 2011 final rule, we also evaluated whether Oklahoma's SIP ensures that emissions from sources within Oklahoma do not interfere with the visibility programs of other states with respect to the 1997 8-hour Ozone NAAQS and the 1997 PM<sub>2.5</sub> NAAQS. In developing their respective regional haze SIPs and reasonable progress goals (RPGs), the Central Regional Air Planning Association (CENRAP) states consulted with each other through CENRAP's work groups. As a result of this process, the understanding was that each CENRAP state would take action to achieve the emissions reductions relied upon by other states in their reasonable progress demonstrations. CENRAP states consulted in the development of RPGs, using the products of the technical consultation process to co-develop their RPGs. In developing their visibility projections using photochemical grid modeling, CENRAP states assumed a certain level of emissions from sources within Oklahoma. The CENRAP modeling assumed SO<sub>2</sub>

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<sup>9</sup> 76 FR 81728 (December 28, 2011).

<sup>10</sup> In a final rule published in the *Federal Register* on January 5, 2016, we disapproved Oklahoma's 2018 RPGs on the 20% least impaired and 20% most impaired days for the Wichita Mountains Class I area because Oklahoma did not adequately demonstrate that its RPGs provide for reasonable progress towards meeting the national visibility goal. Specifically, Oklahoma did not satisfy several of the requirements at section 51.308(d)(1) with regard to setting RPGs, including the requirement to adequately consult with other states that may reasonably be anticipated to cause or contribute to visibility impairment at the Wichita Mountains and the requirement to adequately justify RPGs that are less stringent than the uniform rate of progress (URP). However, that final rulemaking was challenged, and in December 2016, following the submittal of a request by the EPA for a voluntary remand of the parts of the rule under challenge, the Fifth Circuit Court of Appeals remanded the rule in its entirety without vacatur. *Texas v. EPA*, 829 F.3d 405 (5th Cir. 2016).

reductions from the OG&E Sooner Units 1 and 2, the OG&E Muskogee Units 4 and 5, and the AEP/PSO Northeastern Units 3 and 4, which Oklahoma did not secure when making its BART determinations for these sources and were thus not required by the 2010 Oklahoma Regional Haze SIP. Since this modeling was used by other states and Oklahoma in establishing their RPGs, we made the finding that the Oklahoma SIP does not ensure that emissions from sources within Oklahoma do not interfere with measures required in the SIP of any other state under Part C of the CAA to protect visibility.<sup>11</sup> In the December 28, 2011 final rule, we finalized a FIP (Oklahoma SO<sub>2</sub> BART FIP) that controls SO<sub>2</sub> emissions from the six units to address the deficiencies identified in our disapproval of these SO<sub>2</sub> BART determinations and the disapproval of the SIP submission addressing its prong 4 visibility transport obligations for the 1997 8-hour Ozone NAAQS and the 1997 PM<sub>2.5</sub> NAAQS.<sup>12</sup>

On June 20, 2013, Oklahoma submitted a regional haze SIP revision to replace the FIP's SO<sub>2</sub> BART requirements for the AEP/PSO Northeastern Units 3 and 4 and a related revision to the SIP addressing interstate visibility transport requirements (the 2013 Oklahoma Regional Haze SIP Revision). On March 7, 2014, we approved this SIP revision and concurrently withdrew the FIP's applicability to these two units.<sup>13</sup> In addition to approving the SO<sub>2</sub> BART determinations for the AEP/PSO Northeastern Units 3 and 4 in that final rule, we also approved revised NO<sub>x</sub> BART requirements for these two units,<sup>14</sup> and approved the portion of the 2013 Oklahoma Regional Haze SIP Revision concerning Oklahoma's interstate visibility transport obligations of CAA section 110(a)(2)(D)(i)(II) with respect to the 1997 8-hour ozone and 1997 PM<sub>2.5</sub> NAAQS as applied to this source and its associated impacts on other states' programs to

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<sup>11</sup> 76 FR 81728.

<sup>12</sup> *Id.*

<sup>13</sup> 79 FR 12944, 12954 (March 7, 2014).

<sup>14</sup> EPA approved the NO<sub>x</sub> BART determinations for the AEP/PSO Northeastern Units 3 and 4 and all other subject-to-BART sources in Oklahoma in the December 28, 2011 final rule, but Oklahoma revised the EPA-approved NO<sub>x</sub> BART determinations for Northeastern Units 3 and 4 in the 2013 Oklahoma Regional Haze SIP Revision to require earlier installation and compliance with reduced NO<sub>x</sub> emission limits prior to the original SIP-imposed deadline. This is discussed in more detail in section III.C of this notice.

protect visibility in Class I Areas.<sup>15</sup> The FIP provisions applicable to the OG&E Muskogee and Sooner plants remain in place.

## **II. Oklahoma Infrastructure SIP Submittals**

On January 28, 2015, Oklahoma submitted a SIP revision to address the infrastructure requirements for the 2010 1-hour SO<sub>2</sub> NAAQS, including the interstate visibility transport requirements. In its evaluation, Oklahoma stated that the 2010 Regional Haze SIP describes Oklahoma's measures to protect visibility and ensure that emissions do not interfere with any other state's measures to protect visibility. Oklahoma stated that these measures include provisions in the Oklahoma Administrative Code 252:100-8, Part 11. Oklahoma noted that EPA partially approved and partially disapproved Oklahoma's Regional Haze SIP and partially approved and partially disapproved Oklahoma's SIP submission addressing its prong 4 visibility transport requirements for the 1997 8-hour Ozone NAAQS and the 1997 PM<sub>2.5</sub> NAAQS on December 28, 2011. Oklahoma noted that in the same action, EPA promulgated a FIP addressing the disapproved portions of Oklahoma's 2010 Regional Haze SIP and the interstate visibility transport SIP revisions for the 1997 8-hour Ozone NAAQS and the 1997 PM<sub>2.5</sub> NAAQS, and that EPA found that the controls under this FIP, in combination with the controls required by the portion of the Oklahoma Regional Haze SIP submittal approved by EPA, will serve to prevent sources in Oklahoma from emitting pollutants in amounts that will interfere with efforts to protect visibility in other states. Oklahoma also noted that it submitted a revision to its regional haze and interstate visibility transport SIPs (2013 Oklahoma Regional Haze SIP Revision) on June 14, 2013, to replace the FIP as it relates to the AEP/PSO Northeastern Units 3 and 4, and that EPA approved this revision effective April 7, 2014. Oklahoma asserted that any contribution to visibility impairment or interference with any other state's measures to protect visibility attributable to SO<sub>2</sub> emissions are addressed through Oklahoma's 2010 Regional Haze SIP as

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<sup>15</sup> 79 FR at 12945.



revised in the 2013 Oklahoma Regional Haze SIP Revision and through EPA's related regional haze actions in Oklahoma. This includes EPA's FIP action that currently addresses the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5. Oklahoma also noted that although no additional visibility protection obligations are anticipated on Oklahoma's part as a result of the revised 2010 1-hour SO<sub>2</sub> NAAQ, other program actions taken to ensure maintenance of the revised SO<sub>2</sub> NAAQS will indirectly assist in avoiding interference with any other state's measures to protect visibility.

On June 16, 2016, Oklahoma submitted a SIP revision to address the infrastructure requirements for the 2012 PM<sub>2.5</sub> NAAQS, including the transport requirements. In its evaluation, Oklahoma stated that the 2010 Regional Haze SIP describes Oklahoma's measures to protect visibility and ensure that emissions do not interfere with any other state's measures to protect visibility. Oklahoma stated that these measures include provisions in the Oklahoma Administrative Code 252:100-8, Part 11. Oklahoma noted that EPA partially approved and partially disapproved Oklahoma's Regional Haze SIP and partially approved and partially disapproved Oklahoma's SIP submission addressing the visibility prong of interstate transport for the 1997 8-hour Ozone NAAQS and the 1997 PM<sub>2.5</sub> NAAQS on December 28, 2011. Oklahoma noted that in the same action, EPA promulgated a FIP addressing the disapproved portions of Oklahoma's 2010 Regional Haze SIP and the interstate visibility transport SIP submittals for the 1997 8-hour Ozone NAAQS and the 1997 PM<sub>2.5</sub> NAAQS, and that EPA found that the controls under this FIP, in combination with the controls required by the portion of the Oklahoma Regional Haze SIP submittal approved by EPA, will serve to prevent sources in Oklahoma from emitting pollutants in amounts that will interfere with efforts to protect visibility in other states. Oklahoma also noted that it submitted a revision to its regional haze and interstate visibility transport SIPs on June 14, 2013, to replace the FIP as it relates to the AEP/PSO Northeastern Units 3 and 4, and that EPA approved this revision effective April 7, 2014. In its evaluation, Oklahoma asserted that any contribution to visibility impairment or interference with

any other state's measures to protect visibility attributable to emission of PM<sub>2.5</sub> or its precursors (e.g., SO<sub>2</sub>) are addressed through Oklahoma's 2010 Regional Haze SIP as revised in the 2013 Oklahoma Regional Haze SIP Revision and through EPA's related regional haze actions in Oklahoma. This includes EPA's FIP action that currently addresses the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5. Oklahoma also noted that although no additional visibility protection obligations are anticipated on Oklahoma's part as a result of the revised 2012 PM<sub>2.5</sub> NAAQS, other program actions taken to assure maintenance of the revised PM<sub>2.5</sub> NAAQS will indirectly assist in avoiding interference with any other state's measures to protect visibility.

On October 25, 2018, Oklahoma submitted a SIP revision to address the CAA section 110(a)(1) and 110(a)(2) infrastructure and transport requirements for the 2015 Ozone NAAQS. In its evaluation, Oklahoma stated that the 2010 Regional Haze SIP describes Oklahoma's measures to protect visibility and ensure that emissions do not interfere with any other state's measures to protect visibility. Oklahoma stated that these measures include provisions in the Oklahoma Administrative Code 252:100-8, Part 11. Oklahoma noted that EPA partially approved and partially disapproved Oklahoma's Regional Haze SIP and partially approved and partially disapproved Oklahoma's SIP submission addressing the visibility prong of interstate transport for the 1997 8-hour Ozone NAAQS and the 1997 PM<sub>2.5</sub> NAAQS on December 28, 2011. Oklahoma noted that in the same action, EPA promulgated a FIP addressing the disapproved portions of Oklahoma's 2010 Regional Haze SIP and the interstate visibility transport SIP submittals for the 1997 8-hour Ozone NAAQS and the 1997 PM<sub>2.5</sub> NAAQS, and that EPA found that the controls under this FIP, in combination with the controls required by the portion of the Oklahoma Regional Haze SIP submittal approved by EPA, will serve to prevent sources in Oklahoma from emitting pollutants in amounts that will interfere with efforts to protect visibility in other states. Oklahoma also noted that it submitted a revision to its regional haze and interstate visibility transport SIPs on June 14, 2013, to replace the FIP as it relates to

the AEP/PSO Northeastern Units 3 and 4, and that EPA approved this revision effective April 7, 2014. In its evaluation, Oklahoma asserted that ozone from ozone precursor emissions are not believed to contribute significantly to visibility impairment and that Oklahoma's 2010 Regional Haze SIP demonstrates that Oklahoma's PM<sub>2.5</sub> emissions do not interfere with any other state's measures to protect visibility. Oklahoma noted that this portion of the 2010 Regional Haze SIP was approved by EPA on December 28, 2011. Additionally, the submission includes a technical support document (TSD)<sup>16</sup> intended to address the requirements of CAA section 110(a)(2)(D)(i)(I), which requires a state's SIP to contain adequate provisions prohibiting any source or other type of emissions activity within the state from emitting any air pollutant in amounts which will contribute significantly to nonattainment in, or interfere with maintenance by, any other state with respect to any such national primary or secondary ambient air quality standard (i.e., prongs 1 and 2). In that document, Oklahoma asserted that the Oklahoma Department of Environmental Quality (ODEQ) has determined that Oklahoma meets the prong 4 visibility transport provisions for the 2015 Ozone NAAQS, as the state is not contributing significantly to nonattainment or maintenance issues in any other state.

In summary, Oklahoma relied on the following points to support its conclusion that Oklahoma meets the prong 4 visibility transport provision for the 2015 Ozone NAAQS: 1) the modeling and technical analysis in the State's interstate transport SIP revision (as to "prongs 1 and 2" under section 110(a)(2)(D)(i)(I)) purportedly demonstrating that Oklahoma does not significantly contribute to nonattainment or maintenance in another state for the 2015 Ozone NAAQS; 2) the fact that ozone formed from ozone precursor emissions is not believed to contribute significantly to visibility impairment; and 3) Oklahoma's 2010 Regional Haze SIP, which Oklahoma says demonstrates that PM<sub>2.5</sub> emissions from Oklahoma do not interfere with any other state's measures to protect visibility.

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<sup>16</sup> See "Oklahoma Demonstration of Compliance with the Good Neighbor Requirements of Clean Air Act Section 110(a)(2)(D)(i)(I) for the 2015 Ozone National Ambient Air Quality Standard," which is part of Oklahoma's October 25, 2018 Infrastructure SIP submittal for the 2015 Ozone NAAQS.

On December 1, 2020, EPA sent a letter to ODEQ requesting clarification on how the Oklahoma SIP satisfies the prong 4 interstate visibility transport requirement with respect to the 2015 Ozone NAAQS.<sup>17</sup> In a letter dated January 5, 2021, ODEQ pointed out that EPA approved the NO<sub>x</sub> BART determinations in the 2010 Oklahoma Regional Haze SIP and also clarified that the SIP addressed NO<sub>x</sub> and VOC emissions, which are ozone precursors, using an approach that is consistent with what was anticipated under the CENRAP process for the first regional haze planning period.<sup>18</sup> In the letter, ODEQ noted that Sections VII and IX of the 2010 Oklahoma Regional Haze SIP explain that the SIP requires NO<sub>x</sub> reductions resulting from BART and other program requirements, as well as other factors, that are consistent with what was anticipated under the CENRAP consultation process for regional haze SIP development for the first planning period. In the letter, ODEQ further noted that Section VIII of the 2010 Oklahoma Regional Haze SIP explains that the CENRAP modeling used to project the visibility impacts in 2018 as a result of growth and control of emissions from the baseline for Class I areas in CENRAP states included emission adjustments made by ODEQ to reflect presumptive BART controls for the OG&E Sooner Plant, the OG&E Muskogee Plant, and the AEP/PSO Northeastern Plant. For NO<sub>x</sub> emissions, this presumptive control level is equivalent to 0.15 lb/MMBtu for NO<sub>x</sub> BART and is consistent with the NO<sub>x</sub> emission limits required by the 2010 Oklahoma Regional Haze SIP for subject-to-BART units at these three power plants.

In the January 5, 2021 letter, ODEQ also explains that the 2010 Oklahoma Regional Haze SIP did not include additional control requirements to address VOC emissions under regional haze for the first planning period. In the letter, ODEQ points to Section VI(A) of the 2010 Oklahoma Regional Haze SIP, which explains that ODEQ determined that the visibility

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<sup>17</sup> Letter from Michael Feldman, Chief, SO<sub>2</sub> and Regional Haze Section, U.S. Environmental Protection Agency, Region 6, to Melanie Foster, Manager, Rules & Planning Section, Air Quality Division, Oklahoma Department of Environmental Quality, (December 1, 2020). A copy of this letter is included in the docket associated with this proposed rulemaking.

<sup>18</sup> Letter from Kendal Stegmann, Director, Air Quality Division, Oklahoma Department of Environmental Quality, to Michael Feldman, Chief, SO<sub>2</sub> and Regional Haze Section, U.S. Environmental Protection Agency, Region 6 (January 5, 2021). A copy of this letter is included in the docket associated with this proposed rulemaking.

impairing pollutants in Oklahoma include SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, while CENRAP modeling showed that anthropogenic VOCs do not significantly impair visibility at the Wichita Mountains. ODEQ also notes that Section IX(E)(4) of the 2010 Oklahoma Regional Haze SIP explains that the emissions inventory associated with the SIP assigns most emissions of VOCs to biogenic sources, which ODEQ considers to be natural and therefore uncontrollable. ODEQ explains that Section IX(E)(4) of the 2010 Oklahoma Regional Haze SIP noted that a minority of VOC emissions in Oklahoma originate from area, industrial, point, and mobile sources, and that most of these sources already employ controls under various federal mandates. The 2010 Oklahoma Regional Haze SIP explained that considering the small and uncertain contribution of anthropogenic sources of VOC to visibility impairment at the Wichita Mountains, ODEQ did not find further VOC controls reasonable. In the letter, ODEQ explains that these determinations similarly apply to the approach taken in the 2010 Oklahoma Regional Haze SIP regarding potential VOC-related impacts of and remedies for visibility impairment at other states' Class I areas, and that this approach is consistent with what was anticipated under the CERNAP process for the first regional haze planning period. Further, ODEQ notes that Section VIII of the 2010 Oklahoma Regional Haze SIP presented model output data that demonstrates that Oklahoma emissions are projected to impair visibility only insignificantly at all Class I areas in other states, and ODEQ therefore concluded that additional emission reduction action was not needed to protect other Class I areas, including for NO<sub>x</sub> and VOC as ozone precursors.

Thus, ODEQ clarifies in the letter that the EPA-approved portion of the 2010 Oklahoma Regional Haze SIP addressed NO<sub>x</sub> and VOC emissions using an approach that is consistent with what was anticipated in the CENRAP process for the first regional haze planning period and ODEQ states that it believes that, considering the clarifications in the January 5, 2021 letter, and as certified in the October 25, 2018 submittal, the Oklahoma SIP satisfies the interstate visibility transport CAA requirement of section 110(a)(2)(D)(i)(II) with respect to the 2015 Ozone NAAQS.

### III. The EPA's Evaluation

Our 2013 i-SIP guidance addresses the requirements for prong 4 and lays out two ways in which a state's infrastructure SIP submittal may satisfy these requirements.<sup>19</sup> The first method is through a state's confirmation in its infrastructure SIP submittal that it has a fully approved regional haze SIP in place. As previously discussed, EPA promulgated a partial approval and partial disapproval of the 2010 Oklahoma Regional Haze SIP in 2011 because the SO<sub>2</sub> BART determinations for the OG&E Sooner Units 1 and 2, the OG&E Muskogee Units 4 and 5, and the AEP/PSO Northeastern Units 3 and 4 did not comply with our regional haze regulations under 40 CFR 51.308(e), and EPA concurrently promulgated a FIP to address these deficiencies.<sup>20</sup> On June 20, 2013, Oklahoma submitted a SIP revision to address this deficiency with respect to the AEP/PSO Northeastern Units 3 and 4, and the FIP with respect to these two units was withdrawn on March 7, 2014.<sup>21</sup> However, the FIP remains in place with SO<sub>2</sub> BART requirements for the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5. Therefore, Oklahoma cannot rely on a fully approved Regional Haze SIP as the basis for meeting its prong 4 visibility transport obligations for the 2010 SO<sub>2</sub>, 2012 PM<sub>2.5</sub>, and the 2015 Ozone NAAQS.

In the absence of a fully approved Regional Haze SIP, the second method provided by the 2013 i-SIP guidance to meet prong 4 requirements is a demonstration that emissions within a state's jurisdiction do not interfere with other states' plans to protect visibility.<sup>22</sup> EPA interprets prong 4 to be pollutant-specific such that the state need only address the potential for interference with visibility protection caused by the pollutant (including precursors) to which the new or revised NAAQS applies.<sup>23</sup> According to the guidance, such a demonstration for the first planning period should establish or identify the measures in the approved SIP that limit visibility-impairing pollutants and ensure that the resulting reductions conform with any

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<sup>19</sup> See 2013 i-SIP Guidance at 32-35.

<sup>20</sup> 76 FR 81728.

<sup>21</sup> 79 FR 12954.

<sup>22</sup> See 2013 i-SIP Guidance at 34.

<sup>23</sup> See 2013 i-SIP Guidance at 33.

mutually agreed emission reductions under the relevant regional haze regional planning organization (RPO) process.<sup>24</sup> As explained below, Oklahoma did not make such a demonstration in the i-SIP submittals for the 2010 SO<sub>2</sub> and 2012 PM<sub>2.5</sub> NAAQS. The i-SIP submittal for the 2015 Ozone NAAQS as clarified by Oklahoma's January 5, 2021 letter, provides a demonstration identifying the measures in the approved SIP that limit visibility-impairing ozone precursor emissions and clarifies that the resulting reductions conform with mutually agreed emission reductions under the relevant regional haze RPO process with respect to the 2015 Ozone NAAQS. We discuss this in the subsections that follow.

#### **A. Analysis of Oklahoma's January 28, 2015 Prong 4 Submittal for the 2010 SO<sub>2</sub> NAAQS**

The portion of the 2015 infrastructure SIP submittal for the 2010 1-hour SO<sub>2</sub> NAAQS that addresses interstate visibility transport relied on both Oklahoma's 2010 Regional Haze SIP submittal, as revised in the 2013 Regional Haze SIP revision that addresses the AEP/PSO facility, and EPA's FIP that currently applies to the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5. As explained above, the prong 4 requirements are pollutant specific. Some portions of the 2010 Oklahoma Regional Haze SIP that address SO<sub>2</sub> emissions have been disapproved and thus cannot be relied upon by Oklahoma to satisfy the prong 4 requirements. Further, the EPA's 2013 i-SIP guidance states, "Under section 110(a)(2)(D)(i)(II), an i-SIP submission cannot be approved with respect to prong 4 (visibility transport) until the EPA has issued final approval of SIP provisions that the EPA has found to adequately address any contribution of that state's sources to impacts on visibility program requirements in other states."<sup>25</sup> Thus, Oklahoma cannot rely on the existing SO<sub>2</sub> BART FIP to satisfy the prong 4 requirements for the 2010 1-hour SO<sub>2</sub> NAAQS. Moreover, the 2015 i-SIP submittal does not

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<sup>24</sup> See 2013 i-SIP Guidance at 34. See also 76 FR 22036 (April 20, 2011) (containing EPA's approval of the visibility requirement of 110(a)(2)(D)(i)(II) based on a demonstration by Colorado that did not rely on the Colorado Regional Haze SIP).

<sup>25</sup> See 2013 i-SIP Guidance at 32-33.

provide any additional information to demonstrate that the measures in the SIP are sufficient to prohibit emissions from sources within Oklahoma from interfering with measures that have been developed by other states to protect visibility with respect to the 2010 1-hour SO<sub>2</sub> NAAQS. Therefore, while the FIP provides an appropriate level of SO<sub>2</sub> control to prohibit emissions from sources within Oklahoma from interfering with measures that have been developed by other states to protect visibility (as discussed in Section III.E.), the SIP submittal does not; Thus, we are proposing to disapprove the 110(a)(2)(D)(i)(II) prong 4 portion of Oklahoma's 2015 i-SIP submittal for the 2010 1-hour SO<sub>2</sub> NAAQS.

#### **B. Analysis of Oklahoma's June 16, 2016 Prong 4 Submittal for the 2012 PM<sub>2.5</sub> NAAQS**

The portion of the 2016 infrastructure SIP submittal for the 2012 PM<sub>2.5</sub> NAAQS that addresses interstate visibility transport relied on both Oklahoma's 2010 Regional Haze SIP submittal, as revised in the June 20, 2013 SIP revision with respect to the AEP/PSO facility, and EPA's FIP that currently applies to the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5. The portions of Oklahoma's 2010 Regional Haze SIP that address PM BART have been approved, but portions of the SIP that address PM precursor emissions (i.e., SO<sub>2</sub>) have not, and thus cannot be relied upon to satisfy the prong 4 requirements. PM emissions can be emitted directly from sources and can also form in the atmosphere as a result of complex reactions of other pollutants (i.e., precursors) such as SO<sub>2</sub> and NO<sub>x</sub>, which are visibility impairing pollutants themselves and are required to be addressed under regional haze.<sup>26</sup> As discussed above, EPA disapproved the SO<sub>2</sub> BART determinations for the OG&E Sooner Units 1 and 2, the OG&E Muskogee Units 4 and 5, and the AEP/PSO Northeastern Units 3 and 4, and promulgated a FIP to address these deficiencies.<sup>27</sup> EPA approved the 2013 Oklahoma Regional Haze SIP Revision that addressed SO<sub>2</sub> BART for the AEP/PSO Northeastern Units 3 and 4, and

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<sup>26</sup> The BART Guidelines direct states to address SO<sub>2</sub>, NO<sub>x</sub> and direct PM (including both PM<sub>10</sub> and PM<sub>2.5</sub>) emissions as visibility-impairment pollutants, and states must exercise their "best judgment to determine whether VOC or ammonia emissions from a source are likely to have an impact on visibility in an area." See 70 FR 39162.

<sup>27</sup> 76 FR 81728.



EPA withdrew the FIP with respect to these two units on March 7, 2014.<sup>28</sup> However, the FIP remains in place with SO<sub>2</sub> BART requirements for the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5. As explained above, Oklahoma cannot rely upon the portions of the 2010 Oklahoma Regional Haze SIP that address SO<sub>2</sub> emissions that have been disapproved or on the existing SO<sub>2</sub> BART FIP to satisfy the prong 4 requirements for the 2012 PM<sub>2.5</sub> NAAQS. The 2016 i-SIP submittal does not provide any additional information to demonstrate that the measures in the SIP are sufficient to prohibit emissions from sources within Oklahoma from interfering with measures that have been developed by other states to protect visibility with respect to the 2012 PM<sub>2.5</sub> NAAQS. We are therefore proposing to disapprove the 110(a)(D)(2)(i)(II) prong 4 portion of Oklahoma's 2016 infrastructure SIP submittal for the 2012 PM<sub>2.5</sub> NAAQS.

### **C. Analysis of Oklahoma's 2018 Prong 4 Submittal for the 2015 Ozone NAAQS**

In Oklahoma's 2018 infrastructure SIP submittal for the 2015 Ozone NAAQS, Oklahoma asserted that it meets the visibility transport provisions under section 110(a)(2)(D)(i)(II) for the 2015 Ozone NAAQS given that it has determined the state is not contributing significantly to nonattainment or maintenance issues in any other state under section 110(a)(2)(D)(i)(I). The analysis in the SIP submittal that purports to find that Oklahoma emissions do not significantly contribute to nonattainment or interfere with maintenance in another state under section 110(a)(2)(D)(i)(I) focuses on the potential impact of ozone-precursor emissions at certain ozone monitor locations in other states as related to the attainment and maintenance of the ozone NAAQS (i.e., prongs 1 and 2), but does not provide an analysis of *visibility* impacts at Class I areas due to emissions of ozone precursors as visibility pollutants (prong 4).<sup>29</sup> This basis is inadequate for approval of the visibility transport requirements.

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<sup>28</sup> 79 FR 12954.

<sup>29</sup> See 2013 i-SIP Guidance at 33 ("The EPA interprets [prong 4] to be pollutant-specific, such that the infrastructure SIP submission need only address the potential for interference with protection of visibility caused by the pollutant (including precursors) to which the new or revised NAAQS applies.")

In the 2018 submittal, Oklahoma also stated that ozone formed from ozone precursor emissions is not believed to contribute significantly to visibility impairment. Oklahoma asserted that the 2010 Regional Haze SIP demonstrates that PM<sub>2.5</sub> emissions from Oklahoma do not interfere with any other state's measures to protect visibility, and that this portion of the SIP was approved by EPA on December 28, 2011. Here, Oklahoma is referring to EPA's approval of all the PM BART determinations in Oklahoma's 2010 Regional Haze SIP. However, it is unclear in the submittal how the SIP fulfills the prong 4 requirements for the 2015 Ozone NAAQS.<sup>30</sup>

The EPA has not established a separate visibility transport standard for ozone because it does not directly impair visibility or substantially produce or contribute to the production of the secondary air contaminants that cause visibility impairment or regional haze. As stated above, section 110(a)(2)(D)(i)(II) prong 4 requirements apply to all pollutants (including precursors) for which EPA has promulgated a NAAQS. As such, Oklahoma is required to demonstrate to EPA that it has approved measures in its SIP that ensure that ozone-precursor emissions within its jurisdiction do not interfere with other states' visibility protection plans. While ozone itself does not directly impair visibility, ozone precursors (i.e., NO<sub>x</sub> and in some cases volatile organic compounds) can react to generate visibility impairing pollutants. Thus, the pertinent question is whether Oklahoma's SIP adequately controls emissions of ozone precursors that may contribute to visibility impairment in other states and whether the level of control of these emissions is consistent with mutually-agreed emissions reductions under the CENRAP regional haze planning process for the first planning period.

As explained in Oklahoma's January 5, 2021 clarification letter, EPA approved all NO<sub>x</sub> BART determinations in Oklahoma's 2010 Regional Haze SIP and these EPA-approved NO<sub>x</sub> BART determinations conform with the mutually-agreed emission reductions<sup>31</sup> under the

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<sup>30</sup> Id.

<sup>31</sup> During consultation ODEQ indicated that Sooner Units 1 and 2, Muskogee Units 4 and 5, and Northeastern Units 3 and 4 would have emission limits based on 0.15 lb of NO<sub>x</sub> per MMBtu. ODEQ's January 5, 2021 letter noted that Section VIII of the 2010 Oklahoma Regional Haze SIP explained that these emissions reductions for these six units were included in the CENRAP 2018 modeling projections that other CENRAP states relied on in developing their regional haze SIPs.

CENRAP regional haze planning process that Oklahoma and other Midwestern states participated in for regional haze SIP development for the first regional haze planning period.<sup>32</sup> In the 2013 Oklahoma Regional Haze SIP Revision, Oklahoma revised the NO<sub>x</sub> BART requirements for the Northeastern Units 3 and 4 that EPA approved in the December 28, 2011 final rule.<sup>33</sup> The revisions require earlier installation and compliance with reduced NO<sub>x</sub> emission limits prior to the original SIP-imposed deadline.<sup>34</sup> Our December 2011 approval of NO<sub>x</sub> BART for Units 3 and 4 required that these units meet a NO<sub>x</sub> emission limit of 0.15 lb/MMBtu (based on a 30-day rolling average) within five years from the effective date of EPA's approval, or by January 27, 2017.<sup>35</sup> However, under the 2013 Oklahoma Regional Haze SIP Revision, which EPA approved on March 7, 2014, both units are required to meet an initial NO<sub>x</sub> emission limit of 0.23 lb/MMBtu (based on a 30-day rolling average) by December 31, 2013, with additional limits of 1,098 lb/hr per unit on a 30-day rolling average basis and a 9,620 tpy combined cap for both units.<sup>36</sup> By April 16, 2016, one unit is required to be permanently shut down, while the remaining unit is required to meet a NO<sub>x</sub> emission limit of 0.15 lb/MMBtu (based on a 30-day rolling average), with an additional limit of 716 lb/hr on a 30-day rolling average basis and a cap of 3,137 tpy on a 12-month rolling basis. Finally, this second unit is required to shut down by December 31, 2026. Thus, these revised NO<sub>x</sub> BART determination for the Northeastern Units 3 and 4 are more stringent than the determinations that we previously approved given that they require compliance with the 0.15 lb/MMBtu limit on a more expeditious schedule. The Oklahoma SIP contains NO<sub>x</sub> BART determinations for all subject-to-BART sources in Oklahoma, which have been approved by EPA in previous actions and conform with the mutually-agreed emission reductions under the CENRAP regional haze planning process that

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<sup>32</sup> 76 FR 81728.

<sup>33</sup> 76 FR at 81729.

<sup>34</sup> 78 FR 51686, 51690 (August 21, 2013).

<sup>35</sup> 76 FR 16168, 16181, 16182 (March 22, 2011).

<sup>36</sup> 79 FR at 12944.

Oklahoma and other Midwestern states participated in for regional haze SIP development for the first regional haze planning period.

In the January 5, 2021 letter, ODEQ also explained that VOC emissions, which are an ozone precursor, were addressed in the 2010 Oklahoma Regional Haze SIP in a manner consistent with what was anticipated under the CENRAP process for the first regional haze planning period. Specifically, in the 2010 Oklahoma Regional Haze SIP, ODEQ asserted that the emissions inventory associated with that SIP submittal assigns most VOC emissions to biogenic sources, which ODEQ considers to be uncontrollable;<sup>37</sup> The CENRAP modeling shows that anthropogenic VOC emissions do not significantly impair visibility at the Wichita Mountains;<sup>38</sup> And, only a minority of VOC emissions in Oklahoma originate from area, industrial, point, and mobile sources, which ODEQ asserted are sources that are already controlled under various federal mandates.<sup>39</sup> ODEQ stated in the 2010 Oklahoma Regional Haze SIP that considering the small and uncertain contribution of anthropogenic sources of VOC to visibility impairment at the Wichita Mountains, ODEQ did not find further controls for VOC sources to be reasonable.<sup>40</sup> The CENRAP modeling used to project the visibility impacts in 2018 for Class I areas in CENRAP states, which reflects the mutually-agreed emissions reductions in CENRAP states, did not assume additional control of VOC emissions in Oklahoma. In the December 28, 2011 final rule on the 2010 Oklahoma Regional Haze SIP, EPA agreed with ODEQ's decision to not further evaluate or require additional controls for VOC emissions in Oklahoma.<sup>41</sup> Thus, Oklahoma's approach for VOC emissions in the 2010 Oklahoma Regional Haze SIP has been approved by EPA and conforms with the mutually-agreed emission reductions under the CENRAP regional haze planning process that Oklahoma and other Midwestern states participated in for regional haze SIP development for the first regional haze planning period.

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<sup>37</sup> See 2010 Oklahoma Regional Haze SIP, Section IX.E.4, page 113. A copy of the submittal is included in the docket associated with this proposed rulemaking.

<sup>38</sup> Id at Section VI.A, page 69.

<sup>39</sup> Id.

<sup>40</sup> Id.

<sup>41</sup> See 76 FR at 81729 77 FR (proposed rule) and 76 FR 81728 (final rule).

Therefore, we are proposing to find that the Oklahoma SIP includes the necessary emission reductions to satisfy the 110(a)(2)(D)(i)(II) prong 4 requirements for the 2015 Ozone NAAQS and are proposing to approve the portion of the 2018 infrastructure SIP submittal that addresses interstate visibility transport for the 2015 Ozone NAAQS.

#### **D. AEP/PSO Northeastern SO<sub>2</sub> Emission Reductions Assumed in the CENRAP**

##### **Modeling**

As discussed earlier in this notice, Oklahoma engaged in a regional planning process with other CENRAP states to develop their regional haze SIP for the first planning period. This regional planning process included a forum in which state representatives built emission inventories that assumed that specific pollution sources would be controlled to specific levels. This included adjustments to projected emissions by ODEQ to reflect the assumption that the OG&E Sooner Units 1 and 2, the OG&E Muskogee Units 4 and 5, and the AEP/PSO Northeastern Units 3 and 4 would each be controlled to presumptive BART emission levels for SO<sub>2</sub>,<sup>42</sup> which is equivalent to 0.15 lb/MMBtu.<sup>43</sup> Visibility modeling projections conducted by CENRAP subsequently included those emission reductions, and other states relied on them as part of their reasonable progress demonstrations. However, Oklahoma, in its subsequent 2010 Regional Haze SIP, did not include these promised reductions on which the other states relied on in developing their own RPGs and regional haze SIPs. Instead, Oklahoma determined that SO<sub>2</sub> BART for these units was no additional control and specified an SO<sub>2</sub> limit of 0.65 lbs/MMBtu on a 30-day rolling average. In a final rule published on December 28, 2011, we disapproved the SIP's SO<sub>2</sub> BART determinations for these six units because they do not comply with our regulations under 40 CFR 51.308(e).<sup>44</sup> In the same final rule, we promulgated a FIP establishing

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<sup>42</sup> 76 FR at 16189 and 76 FR at 81735.

<sup>43</sup> 70 FR 39104, 39131 (July 6, 2005).

<sup>44</sup> 76 FR at 81730.

an emission limit of 0.06 lb/MMBtu for each of the six units for purposes of complying with SO<sub>2</sub> BART.<sup>45</sup>

On June 20, 2013, Oklahoma submitted a regional haze SIP revision to replace the FIP's SO<sub>2</sub> BART requirements for the AEP/PSO Northeastern Units 3 and 4. On March 7, 2014, we approved this SIP revision and concurrently withdrew the sections of the FIP that applied to those two units.<sup>46</sup> The 2013 Oklahoma Regional Haze SIP Revision requires one of the two Northeastern units to shut down no later than April 16, 2016, while the remaining unit is required to install dry sorbent injection (DSI) to meet an SO<sub>2</sub> emission limit of 0.4 lb/MMBtu.<sup>47</sup> However, the SO<sub>2</sub> emission reductions for the AEP/PSO Northeastern facility contained in the 2013 Oklahoma Regional Haze SIP Revision fall short of the levels assumed in other states' regional haze plans through the CENRAP RPO process. In order to achieve emission levels equivalent to the levels assumed in other states' regional haze plans through the CENRAP RPO process, the remaining Northeastern unit would have to meet an emission limit of 0.3 lb/MMBtu (0.15 + 0.15).<sup>48</sup> To address this, the 2013 Oklahoma Regional Haze SIP Revision also requires the source operators to optimize the performance of DSI on the remaining unit to ensure that the best possible performance is achieved and adjust the limit accordingly. The "AEP/PSO Settlement Agreement" included in the 2013 Oklahoma Regional Haze SIP Revision requires the company to develop and propose a monitoring program to test various operating profiles and other measures in order to determine whether increased SO<sub>2</sub> removal efficiencies can be achieved during normal operations.<sup>49</sup> AEP/PSO was required to implement this monitoring program and to evaluate and report the results to EPA and ODEQ. If the evaluation demonstrated that the

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<sup>45</sup> 76 FR 81728.

<sup>46</sup> 79 FR 12954.

<sup>47</sup> 79 FR at 12945.

<sup>48</sup> Northeastern Units 3 and 4 are similar design capacity so comparing them as the same is a reasonable approximation for this contextual assessment. Specific assessment is included later in this notice and in docket materials.

<sup>49</sup> See Attachment A, paragraph 1(f) of the "AEP/PSO Settlement Agreement," which is presented in Appendix I of the June 20, 2013 Oklahoma Regional Haze SIP revision. A copy of the submittal is found in the docket for this proposed rulemaking.

technology is capable of sustainably achieving an emission rate of less than 0.37 lbs/MMBtu on a 30-day rolling average basis without (i) altering the unit's fuel supply, (ii) incurring additional capital costs, (iii) increasing operating expenses by more than a negligible amount, and/or (iv) adversely impacting overall unit operations, ODEQ would have to propose to revise the emission rate for the remaining Northeastern unit by 60 percent of the difference between 0.40 and the demonstrated emission rate.<sup>50</sup>

If it is determined that the remaining operating unit still cannot meet the emission limit of 0.3 lb/MMBtu, then the 2013 Oklahoma Regional Haze SIP Revision contains an enforceable commitment obligating ODEQ to “obtain and/or identify additional SO<sub>2</sub> reductions within the State of Oklahoma to the extent necessary to achieve the anticipated visibility benefits estimated” by CENRAP.<sup>51</sup> As explained in our March 7, 2014 final rule approving the 2013 Oklahoma Regional Haze SIP Revision, any additional SO<sub>2</sub> emissions reductions that can be obtained or identified from the northeast quadrant of the State will be presumed to count toward the emission reductions necessary to achieve the anticipated visibility benefits associated with a 0.30 lb/MMBtu emission limit at Northeastern Power Station.<sup>52</sup> Emissions reductions obtained outside the northeast quadrant that are technically justified will also be counted.<sup>53</sup> We explained in our March 7, 2014 final rule that if necessary, additional emissions reductions are to be obtained via enforceable emission limits or control equipment requirements where necessary and submitted to EPA as a SIP revision as expeditiously as practicable, but in no event later than the end of the first full Oklahoma legislative session occurring subsequent to AEP/PSO’s submission of the evaluation and report for the monitoring program required under the AEP/PSO Settlement Agreement.<sup>54</sup>

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<sup>50</sup> Id.

<sup>51</sup> 79 FR at 12945.

<sup>52</sup> 79 FR at 12945

<sup>53</sup> 79 FR at 12945.

<sup>54</sup> 79 FR at 12945.

On June 25, 2019, AEP/PSO submitted to ODEQ the “BART SO<sub>2</sub> Monitoring Program for Northeastern Power Station Unit 3” (SO<sub>2</sub> Monitoring Program), pursuant to one of the requirements in the AEP/PSO Settlement Agreement.<sup>55</sup> Based on the results of the SO<sub>2</sub> Monitoring Program, AEP/PSO concluded that the lowest target emission rate sustainably achieved consistent with the conditions in the AEP/PSO Agreement is 0.35 lb/MMBTU on a 30-day rolling average basis, and that the resulting federally enforceable emission rate should be 0.37 lb/MMBTU on a 30-day rolling average basis.<sup>56</sup> However, an emission limit of 0.37 lb/MMBTU for AEP/PSO Northeastern Unit 3 would still fall short of the 0.3 lb/MMBTU emission limit necessary to achieve emission levels equivalent to the levels assumed in other states’ regional haze plans through the CENRAP RPO process.

Following final disapproval of a SIP revision in whole or in part, EPA has an obligation under section 110(c) of the Act to either approve a SIP revision and/or promulgate a FIP to address the disapproval within 24 months. We believe EPA’s FIP obligation under section 110(c) could be addressed through a demonstration that the deficiencies in the Oklahoma SIP that form the basis of our proposed disapproval of the interstate visibility transport portions of the Oklahoma i-SIP submissions for the 2010 SO<sub>2</sub> and 2012 PM<sub>2.5</sub> NAAQS are already addressed by the existing FIP in place for the Oklahoma Regional Haze program. As discussed in the next section, we have assessed whether the emissions reductions secured by the existing SO<sub>2</sub> BART emission limits for the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5, required under the existing FIP, are sufficient to make up for any shortfall to achieve the necessary anticipated visibility benefits associated with a 0.30 lb/MMBTU emission limit at Northeastern Power Station that CENRAP states agreed on and relied upon in their regional haze plans. We discuss our technical analysis in the subsection that follows.

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<sup>55</sup> A copy of the June 25, 2019 “BART SO<sub>2</sub> Monitoring Program for Northeastern Power Station Unit 3” can be found in the docket for this proposed rulemaking.

<sup>56</sup> The 0.37 lb/MMBTU emission rate is 60 percent of the difference between 0.40 and the demonstrated emission rate (0.35 lb/MMBTU), per the terms of the AEP/PSO Settlement Agreement.



## **E. Proposed Finding that EPA's Prong 4 FIP Obligations are Satisfied for the 2010 SO<sub>2</sub> and 2012 PM<sub>2.5</sub> NAAQS**

For the reasons explained above, Oklahoma's reliance on both its 2010 Regional Haze SIP submittal as revised in its 2013 Regional Haze SIP revision and EPA's FIP that applies to the OG&E Sooner Units 1 and 2 and OG&E Muskogee Units 4 and 5 is insufficient to satisfy its prong 4 requirements in accordance with EPA's 2013 i-SIP guidance. EPA is thus proposing to disapprove the submissions with regard to CAA section 110(a)(2)(D)(i)(II). EPA's disapproval triggers its obligation to promulgate a FIP under CAA section 111(c)(1) to address the deficiencies in the state's SIP. However, as discussed below, EPA finds that its FIP obligation with respect to prong 4 for these two NAAQS is already satisfied, and no further action is required.

The FIP we published on December 28, 2011,<sup>57</sup> included SO<sub>2</sub> emission limitations for the OG&E Sooner Units 1 and 2, the OG&E Muskogee Units 4 and 5, and the AEP/PSO Northeastern Units 3 and 4 based on EPA's analysis of the five BART statutory factors, and these emission limitations reflected a level of control more stringent than what was assumed in the CENRAP modeling.<sup>58</sup> On June 20, 2013, Oklahoma submitted a regional haze SIP revision to replace the FIP's SO<sub>2</sub> BART requirements for the AEP/PSO Northeastern Units 3 and 4. On March 7, 2014, we approved this SIP revision and concurrently withdrew the FIP's applicability to these two units.<sup>59</sup> The FIP provisions applicable to the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5 remain in place.

As discussed in the previous subsection, based on the results of the SO<sub>2</sub> Monitoring Program that was required under the AEP/PSO Settlement Agreement and part of the 2013 Regional Haze SIP Revision, AEP/PSO concluded that the federally enforceable emission rate

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<sup>57</sup> 76 FR 81728.

<sup>58</sup> 76 FR 16193.

<sup>59</sup> 79 FR 12954 (March 7, 2014).

for AEP/PSO Northeastern Unit 3 should be 0.37 lb/MMBtu on a 30-day rolling average basis. However, this level of control falls short of the 0.3 lb/MMBtu emission limit necessary to achieve emission levels equivalent to the levels assumed in other states' regional haze plans through the CENRAP RPO process. To address this issue, EPA assessed whether the SO<sub>2</sub> emissions reductions secured from other facilities under the existing FIP promulgated on December 28, 2011, would be sufficient to make up for the shortfall in emissions reductions and associated visibility benefit from the AEP/PSO Northeastern facility compared to what was assumed in the CENRAP modeling. Under the CENRAP regional haze planning process, CENRAP included emissions for these sources based upon Oklahoma's indications that the OG&E Sooner Units 1 and 2, the OG&E Muskogee Units 4 and 5, and the AEP/PSO Northeastern Units 3 and 4 would each be controlled to presumptive BART emission levels for SO<sub>2</sub>, which is 0.15 lb/MMBtu.<sup>60</sup> Further, the FIP EPA promulgated on December 28, 2011, which continues to apply to the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5, requires each of these four units to comply with an emission limit of 0.06 lb/MMBtu for purposes of complying with the SO<sub>2</sub> BART requirements.<sup>61</sup>

In Table 1 below, we present the controlled SO<sub>2</sub> annual emission levels included in the CENRAP chemical transport modeling using the Comprehensive Air Quality Model with Extensions (CAMx) for the six units and the controlled SO<sub>2</sub> annual emission levels required by both the FIP for 4 units and the 2013 Oklahoma Regional Haze SIP Revision for the AEP/PSO Northeastern facility's 2 units.<sup>62</sup> These SO<sub>2</sub> annual emissions were based on annual firing rate information for the base period (2002) and the appropriate lb/MMBtu emission limit. The CENRAP CAMx modeling assumed that AEP/PSO Northeastern Units 3 and 4 would have combined controlled SO<sub>2</sub> emissions of 5,921 tpy, while the 2013 Oklahoma Regional Haze SIP

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<sup>60</sup> 76 FR at 16189 and 76 FR at 81735.

<sup>61</sup> Although the FIP requires an SO<sub>2</sub> emission limit of 0.06 lb/MMBtu for the OG&E Muskogee Units 4 and 5, the company elected to convert the units to natural gas in 2019 to comply with this emission limit. Therefore, these two units have actual SO<sub>2</sub> emissions near zero.

<sup>62</sup> See the Excel spreadsheet "NE SIP vs FIP visibility review calcs.xlsx" which can be found in the docket for this proposed rulemaking.

revision includes control requirements that result in combined controlled SO<sub>2</sub> emissions of 7,895 tpy using the same annual firing rate information used in CENRAP's CAMx modeling. This results in a shortfall of 1,974 tpy between the controlled emission level assumed in the CENRAP CAMx modeling and the level of control required by the 2013 SIP Revision. The CENRAP CAMx modeling also assumed that the OG&E Muskogee Units 4 and 5 would have combined controlled SO<sub>2</sub> emissions of 5,249 tpy, while the FIP requires SO<sub>2</sub> controls that result in combined controlled SO<sub>2</sub> emissions of 2,100 tpy using the same annual firing rate information used in CENRAP's CAMx modeling. The FIP results in SO<sub>2</sub> controlled emissions on Muskogee units that are 3,150 SO<sub>2</sub> tpy lower than the level assumed in the CENRAP modeling, which is greater than the 1,974 tpy shortfall from the AEP/PSO Northeastern facility. Focusing on the OG&E Muskogee Units 4 and 5 alone, the level of SO<sub>2</sub> control required by the FIP at these two units is sufficient to make up for the shortfall in emission reductions from the AEP/PSO Northeastern facility. This is significant because the OG&E Muskogee facility is located in the northeast quadrant of Oklahoma, which is where the AEP/PSO Northeastern facility is located. In our final rule approving the 2013 Oklahoma Regional Haze SIP revision, we explained that any additional SO<sub>2</sub> emissions reductions that can be obtained or identified from the northeast quadrant of the State will be presumed to count toward the emission reductions necessary to achieve the anticipated visibility benefits associated with a 0.30 lb/MMBtu emission limit at Northeastern Power Station.<sup>63</sup> The OG&E Sooner Units 1 & 2 also provide additional surplus emissions (3304 tpy of SO<sub>2</sub>) that provide benefit beyond the net surplus of 1,176 tpy of SO<sub>2</sub> from the net of Muskogee units surplus and Northeastern units shortfall (3150 tpy -1974 tpy). The level of SO<sub>2</sub> controls within EPA's FIP is therefore sufficient to make up for the shortfall from the AEP/PSO Northeastern facility.

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<sup>63</sup> 79 FR 12945.

**Table 1. Comparison of Controlled SO<sub>2</sub> Emissions Reductions in SIP/FIP vs. CENRAP CAMx Modeling**

<b>Facility/Unit</b>	<b>Annual Avg. Heat Input Rate Used in CAMx Modeling for SIP (MMBtu/hr)</b>	<b>CENRAP Modeling SO<sub>2</sub> Emission Limit Assumption (lb/MMBtu)</b>	<b>CENRAP Modeling Controlled SO<sub>2</sub> Emissions Assumption (tpy)*</b>	<b>SIP/FIP SO<sub>2</sub> Emission Limit (lb/MMBtu)</b>	<b>SIP/FIP Controlled SO<sub>2</sub> Emissions (tpy)*</b>
OG&E Sooner Unit 1	4548	0.15	2988.2	0.06	1,195.3
OG&E Sooner Unit 2	3835	0.15	2519.4	0.06	1,007.7
OG&E Muskogee Unit 4	4112	0.15	2701.7	0.06	1,440.1**
OG&E Muskogee Unit 5	3877	0.15	2547.5	0.06	1,080.7**
AEP/PSO Northeastern Unit 3	4506	0.15	2960.6	0.40	7,895.0
AEP/PSO Northeastern Unit 4	4506	0.15	2960.6	0	0
Total Controlled SO <sub>2</sub> Emissions	-	-	16,678	-	12,198

\*Controlled SO<sub>2</sub> emissions calculated based on the 2002 annual heat input rate (MMBtu/yr) of the unit used in CENRAP's CAMx modeling that was included in CENRAP states SIPs.

\*\*The controlled SO<sub>2</sub> emissions we have calculated in this table for the OG&E Muskogee Units 4 and 5 are based on the FIP emission limits and the actual annual heat input rate (MMBtu/yr). However, OG&E Muskogee Units 4 and 5 converted to natural gas to comply with their SO<sub>2</sub> BART emission limits in the FIP. Therefore, even though the FIP requires SO<sub>2</sub> emission limits of 0.06 lb/MMBtu, these two units are actually emitting SO<sub>2</sub> at much lower (near negligible) levels.

Since hourly emission estimates for these six units were also used in CALPUFF modeling that was part of the BART analyses in the 2010 Oklahoma Regional Haze SIP, the FIP and the 2013 SIP revision, we also evaluated the difference in modeled emission rates and emissions used in the CALPUFF modeling to compare the estimated hourly emission rates between the 0.15 lb/MMBtu presumptive rate utilized in the CENRAP RPO process and the rates required by the FIP and 2013 SIP revision. The CALPUFF modeling provides visibility impact information for each of the three facilities to further support that the net changes in emissions at these three facilities result in a net surplus of emission reductions and visibility benefits that supports EPA's proposed conclusion that visibility transport is adequately addressed for SO<sub>2</sub>.

Below we discuss the difference in emissions followed by a discussion of the modeled visibility impacts.

Single source modeling with the CALPUFF model was conducted for each of these facilities using maximum firing rates (instead of the actual annual firing rate used in CAMx analysis). The use of maximum firing rate rather than the actual annual rate that was utilized in the CENRAP CAMx modeling results in a higher estimate of hourly emission rates and also annual emission rates. Since these maximum hourly emission rates used for CALPUFF modeling give a larger difference (larger potential shortfall) for the Northeastern Units 3 & 4 and also are the emission rates evaluated for individual visibility assessments, we perform our evaluation on these rates as well as the annual CAMx modeled rates discussed above and in Table 1. In Table 2, these controlled SO<sub>2</sub> maximum hourly emission levels were calculated assuming the maximum heat input rate (MMBtu/hr) of each unit, which is also the heat input rate used in EPA's CALPUFF BART modeling for the FIP, multiplied by the applicable emission rate (lb/MMBtu). A comparison of these numbers shows that even though the AEP/PSO Northeastern Unit 3 is required to comply with an emission limit of 0.40 lb/MMBtu under the 2013 Oklahoma Regional Haze SIP Revision, which is higher (less stringent) than the 0.30 lb/MMBtu level (0.15 + 0.15 for Northeastern Units 3 and 4) needed in order to achieve hourly emission levels equivalent to the levels relied upon in other states' regional haze plans through the CENRAP RPO process, the total maximum hourly controlled SO<sub>2</sub> emissions levels for the six units under the FIP and the 2013 Oklahoma Regional Haze SIP Revision are lower than the total controlled maximum hourly SO<sub>2</sub> emissions levels based on the presumptive control level included in the CENRAP RPO consultation and modeling. In other words, the FIP and the 2013 Oklahoma Regional Haze SIP Revision result in greater SO<sub>2</sub> emission reductions for these three facilities for the maximum hourly emissions compared to the maximum hourly emissions based on the 0.15 lb/MMBtu emission limit used in the CENRAP RPO consultation process. Specifically, the combination of the FIP and the 2013 Oklahoma Regional Haze SIP Revision result in combined

maximum hourly controlled SO<sub>2</sub> emissions of 3,596.3 lb/hr from the six units, which is 1,293.4 lb/hr less than the levels estimated from the rate (4,889.7 lb/hr) based on the 0.15 lb of SO<sub>2</sub>/MMBtu controlled emission rate that Oklahoma shared in consultation and was used in the CENRAP RPO process, including the CENRAP CAMx modeling. This is because the FIP requires a greater level of SO<sub>2</sub> control for the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5 than the presumptive rate included in consultation and in the CENRAP CAMx modeling. The more stringent level of SO<sub>2</sub> controls required by EPA's FIP is therefore sufficient to make up for the shortfall from the AEP/PSO Northeastern facility. Using the 0.15 lb/MMBtu controlled emission rate from the CENRAP CAMx modeling, the maximum hourly emission rate using the higher firing rate (maximum firing rate) calculated that AEP/PSO Northeastern Units 3 and 4 would have combined controlled SO<sub>2</sub> emissions of 1710.9 lb/hr, while the 2013 Oklahoma Regional Haze SIP revision includes control requirements that result in combined controlled SO<sub>2</sub> maximum hourly emissions of 2324.8 lb/hr, resulting in a shortfall of 613.9 lb/hr. Using the 0.15 lb/MMBtu from the CENRAP CAMx modeling, the OG&E Muskogee Units 4 and 5 would have combined maximum hourly controlled SO<sub>2</sub> emissions of 1644 lb/hr, while the FIP requires SO<sub>2</sub> controls that result in combined maximum hourly controlled SO<sub>2</sub> emissions of 657.6 lb/hr, a difference of 986.4 lb/hr. This surplus of 986.4 lb/hr of SO<sub>2</sub> is greater than the 613.9 lb/hr shortfall from the AEP/PSO Northeastern facility. Focusing on the OG&E Muskogee Units 4 and 5 alone, the level of SO<sub>2</sub> control required by the FIP at these two units is sufficient to make up for the shortfall from the AEP/PSO Northeastern facility. This is significant because the OG&E Muskogee facility is located in the northeast quadrant of Oklahoma, which is where the AEP/PSO Northeastern facility is located. In our final rule approving the 2013 Oklahoma Regional Haze SIP revision, we explained that any additional SO<sub>2</sub> emissions reductions that can be obtained or identified from the northeast quadrant of the State will be presumed to count toward the emission reductions necessary to achieve the anticipated visibility benefits associated with a 0.30 lb/MMBtu emission limit at Northeastern Power

Station.<sup>64</sup> The OG&E Sooner Units 1 & 2 also provide an additional surplus of maximum hourly emission reductions (920.9 lb/hr of SO<sub>2</sub>) that provide benefit beyond the net surplus of 372.5 lb/hr of SO<sub>2</sub> from Muskogee units surplus and Northeastern units shortfall (986.4 lb/hr – 613.9 lb/hr). The level of SO<sub>2</sub> controls within EPA’s FIP is therefore sufficient to make up for the shortfall from the AEP/PSO Northeastern facility when comparing maximum hourly emissions. In the spreadsheet in the docket we also evaluated using these maximum hourly emission estimates on an annual basis (tpy) for general comparison and it also indicated that EPA’s FIP requirements result in a net surplus of annual emissions.<sup>65</sup>

**Table 2. Comparison of Controlled SO<sub>2</sub> Emissions Reductions in SIP/FIP vs. CENRAP CALPUFF Modeling**

<b>Facility/Unit</b>	<b>Maximum Heat Input Rate Used in BART Modeling for FIP (MMBtu/hr)</b>	<b>CENRAP Modeling SO<sub>2</sub> Emission Limit Assumption (lb/MMBtu)</b>	<b>CENRAP Modeling Controlled SO<sub>2</sub> Emissions Assumption (lb/hr)*</b>	<b>SIP/FIP SO<sub>2</sub> Emission Limit (lb/MMBtu)</b>	<b>SIP/FIP Controlled SO<sub>2</sub> Emissions (lb/hr)*</b>
OG&E Sooner Unit 1	5116	0.15	767.40	0.06	306.96
OG&E Sooner Unit 2	5116	0.15	767.40	0.06	306.96
OG&E Muskogee Unit 4	5480	0.15	822.0	0.06	328.8**
OG&E Muskogee Unit 5	5480	0.15	822.0	0.06	328.8**
AEP/PSO Northeastern Unit	5812	0.15	871.8	0.40	2324.8
AEP/PSO Northeastern Unit	5594	0.15	839.1	0	0
Total Controlled SO <sub>2</sub> Emissions	-	-	4889.7	-	3596.3

\*Controlled SO<sub>2</sub> emissions calculated based on the maximum heat input rate (MMBtu/hr) of the unit used in EPA’s BART modeling for the FIP.

\*\*The controlled SO<sub>2</sub> emissions we have calculated in this table for the OG&E Muskogee Units 4 and 5 are based on the FIP emission limits. However, OG&E Muskogee Units 4 and 5 converted to natural gas to comply with their SO<sub>2</sub>

<sup>64</sup> 79 FR 12945.

<sup>65</sup> See “CALPUFF tpy” tab of the Excel spreadsheet “NE SIP vs FIP visibility review calcs.xlsx,” which can be found in the docket for this proposed rulemaking.

BART emission limits in the FIP. Therefore, even though the FIP requires SO<sub>2</sub> emission limits of 0.06 lb/MMBtu, these two units are actually emitting SO<sub>2</sub> at much lower (near negligible) levels.

We also assessed whether the visibility benefits resulting from the SO<sub>2</sub> controls for the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5 under the FIP are estimated to make up for any visibility benefit shortfall from the AEP/PSO Northeastern Units 3 and 4 by scaling modeled visibility improvements from the CALPUFF modeling that was performed as part of the 2011 Oklahoma SO<sub>2</sub> BART FIP.<sup>66</sup> Based on previous modeling performed for these sources and other sources in other Region 6 FIPs and SIPs linear scaling within the ranges performed is a reasonable approach to estimate impacts. We scaled modeled visibility improvements for Wichita Mountains as well as Class I areas in other states affected by Oklahoma: Caney Creek Wilderness Area and Upper Buffalo Wilderness Area in Arkansas and Hercules-Glades Wilderness Area in Missouri. We used the 2001-2003 average of the 98<sup>th</sup> percentile of daily maximum dv as the visibility impact values for our calculations and assumed linear concentration and linear visibility impairment calculations. Based on our calculations, the SO<sub>2</sub> emission reduction shortfall in the 2013 Oklahoma Regional Haze SIP Revision for the AEP/PSO Northeastern Units 3 and 4 (difference between visibility impacts under the 2013 SIP requirements and the CENRAP consultation and modeling assumptions of 0.15 lb/MMBtu for each unit) is estimated to result in a visibility benefit shortfall of 0.096 dv for the four affected Class I areas combined (See Table 3 below).<sup>67</sup> On the other hand, the FIP's estimated visibility benefits in excess of the assumptions in the CENRAP consultation and modeling (i.e., comparing 0.15 lb/MMBtu emission limit from the CENRAP consultation and CAMx modeling with 0.06 lb/MMBtu emission limit required under the FIP) with respect to the OG&E Muskogee Units 4 and 5 are 0.332 dv and the OG&E Sooner Units 1 and 2 are 0.190 dv for the four affected Class I

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<sup>66</sup> Our calculations are found in the Excel spreadsheet "NE SIP vs FIP visibility review calcs.xlsx," which can be found in the docket for this proposed rulemaking.

<sup>67</sup> See "Summary Visibility" tab of the Excel spreadsheet "NE SIP vs FIP visibility review calcs.xlsx," which can be found in the docket for this proposed rulemaking.



areas combined.<sup>68</sup> The excess benefit from OG&E Muskogee Units 4 and 5 alone is enough to more than offset the Northeastern shortfall at each Class I area, including the nearby areas in other states. In addition, the cumulative benefit at all four Class I areas is greater than the cumulative shortfall, resulting in an overall benefit of 0.236 dv (0.332 dv excess – 0.096 dv shortfall = 0.236 dv). Including the benefits from the four OG&E Muskogee and Sooner units results in a net estimated excess visibility benefit of 0.425 dv at the four affected Class I areas combined. These results are summarized in the Table 3 below.

**Table 3. Estimated Shortfall and Excess Visibility Benefits at Affected Class I Areas Due to SO<sub>2</sub> Controls**

Class I Area	2001-2003 Average 98 <sup>th</sup> Percentile Value ( $\Delta$ dv)				
	AEP/PSO Northeastern Estimated Visibility Benefit Shortfall <sup>1</sup> ( $\Delta$ dv)	OG&E Sooner Estimated Visibility Benefit Excess <sup>2</sup> ( $\Delta$ dv)	OG&E Muskogee Estimated Visibility Benefit Excess <sup>2</sup> ( $\Delta$ dv)	Sum of OG&E Sooner and Muskogee Estimated Visibility Benefit Excess <sup>2</sup> ( $\Delta$ dv)	Estimated Net Excess Visibility Benefit <sup>3</sup> ( $\Delta$ dv)
Wichita Mountains	0.033	0.097	0.091	0.187	0.154
Caney Creek	0.025	0.035	0.072	0.107	0.082
Upper Buffalo	0.017	0.033	0.094	0.127	0.110
Hercules-Glades	0.022	0.026	0.076	0.102	0.081
Total	0.096	0.190	0.332	0.522	0.425

<sup>1</sup>Based on a comparison of SO<sub>2</sub> control requirements for the AEP/PSO Northeastern facility in the 2013 Regional Haze SIP (i.e., zero emissions for one unit and 0.4 lb/MMBtu for the remaining unit) against the CENRAP consultation and modeling assumptions (0.15 lb/MMBtu for each unit).

<sup>2</sup>Based on a comparison of SO<sub>2</sub> control requirements in the FIP (0.06 lb/MMBtu for each unit) against the CENRAP consultation and modeling assumptions (0.15 lb/MMBtu for each unit).

<sup>3</sup>Based on a comparison of the “Sum of OG&E Sooner and Muskogee Estimated Visibility Benefit Excess” column against the “AEP/PSO Northeastern Estimated Visibility Benefit Shortfall” column.

<sup>68</sup> See “Summary Visibility” tab of the Excel spreadsheet “NE SIP vs FIP visibility review calcs.xlsx,” which can be found in the docket for this proposed rulemaking.

The FIP SO<sub>2</sub> emission limits for the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5 are permanent and federally enforceable.<sup>69</sup> Therefore, we are proposing to find that the existing SO<sub>2</sub> emission limits for the OG&E Sooner Units 1 and 2 and the OG&E Muskogee Units 4 and 5, required under the FIP, are sufficient to make up for the shortfall in the 2013 Oklahoma Regional Haze SIP Revision to secure the emission reductions necessary to achieve the anticipated visibility benefits associated with a 0.30 lb/MMBtu emission limit at Northeastern Power Station.

The CENRAP modeling did not assume there would be any PM emission reductions from sources in Oklahoma for the first planning period. Therefore, the PM BART determinations in Oklahoma's 2010 Regional Haze SIP, which EPA approved on December 28, 2011,<sup>70</sup> conform with the mutually agreed emission reductions under the CENRAP regional haze planning process. Based on our assessment presented in the preceding paragraphs, we believe that the SO<sub>2</sub> controls required by the existing FIP, in combination with the SO<sub>2</sub> controls required by the EPA-approved 2013 Oklahoma Regional Haze SIP Revision, constitute an assemblage of SO<sub>2</sub> controls that conform with the mutually agreed emission reductions under the CENRAP regional haze planning process. This ensures that the existing FIP, together with the approved SIP, prevents sources in Oklahoma from emitting pollutants in amounts that will interfere with efforts to protect visibility in other states with respect to the 2010 1-hour SO<sub>2</sub> and the 2012 PM<sub>2.5</sub> NAAQS. Under EPA's 2013 i-SIP guidance, this is sufficient to satisfy prong 4 requirements for the first planning period.<sup>71</sup> Thus, there are no additional practical consequences from this disapproval for the state, the sources within its jurisdiction, or the EPA.<sup>72</sup> EPA is proposing to find that its prong 4 obligations in Oklahoma for the 2010 1-hour SO<sub>2</sub> and 2012 PM<sub>2.5</sub> NAAQS are satisfied.

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<sup>69</sup> Due to litigation over the FIP, the deadline by which these units were required to meet their SO<sub>2</sub> emission limits contained in the FIP is January 4, 2019. The necessary control equipment was installed by the compliance deadline and these units are currently meeting their SO<sub>2</sub> emission limits.

<sup>70</sup> 76 FR 81728.

<sup>71</sup> See 2013 i-SIP Guidance at 33.

<sup>72</sup> Id at 34-35.

## F. Impact on Areas of Indian Country

Following the U.S. Supreme Court decision in *McGirt v Oklahoma*, 140 S.Ct. 2452 (2020), the Governor of the State of Oklahoma requested approval under Section 10211(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act of 2005: A Legacy for Users, Pub. Law 109-59, 119 Stat. 1144, 1937 (August 10, 2005) ("SAFETEA"), to administer in certain areas of Indian country (as defined at 18 U.S.C. § 1151) the State's environmental regulatory programs that were previously approved by the EPA outside of Indian country.<sup>73</sup> The State's request excluded certain areas of Indian country further described below. In addition, the State only sought approval to the extent that such approval is necessary for the State to administer a program in light of *Oklahoma Dept. of Environmental Quality v. EPA*, 740 F.3d 185 (D.C. Cir. 2014).<sup>74</sup>

On October 1, 2020, the EPA approved Oklahoma's SAFETEA request to administer all of the State's EPA-approved environmental regulatory programs, including the Oklahoma SIP, in the requested areas of Indian country.<sup>75</sup> As requested by Oklahoma, the EPA's approval under SAFETEA does not include Indian country lands, including rights-of-way running through the same, that: (1) qualify as Indian allotments, the Indian titles to which have not been extinguished, under 18 U.S.C. § 1151(c); (2) are held in trust by the United States on behalf of an individual Indian or Tribe; or (3) are owned in fee by a Tribe, if the Tribe (a) acquired that fee title to such land, or an area that included such land, in accordance with a treaty with the United States to which such Tribe was a party, and (b) never allotted the land to a member or citizen of the Tribe (collectively "excluded Indian country lands").

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<sup>73</sup> A copy of the Governor's July 22, 2020 request can be found in the docket for this proposed rulemaking.

<sup>74</sup> In *ODEQ v. EPA*, the D.C. Circuit held that under the CAA, a state has the authority to implement a SIP in non-reservation areas of Indian country in the state, where there has been no demonstration of tribal jurisdiction. Under the D.C. Circuit's decision, the CAA does not provide authority to states to implement SIPs in Indian reservations. *ODEQ* did not, however, substantively address the separate authority in Indian country provided specifically to Oklahoma under SAFETEA. That separate authority was not invoked until the State submitted its request under SAFETEA, and was not approved until EPA's decision, described in this section, on October 1, 2020.

<sup>75</sup> A copy of EPA's October 1, 2020 approval can be found in the docket for this proposed rulemaking.

EPA's approval under SAFETEA expressly provided that to the extent EPA's prior approvals of Oklahoma's environmental programs excluded Indian country, any such exclusions are superseded for the geographic areas of Indian country covered by the EPA's approval of Oklahoma's SAFETEA request.<sup>76</sup> The approval also provided that future revisions or amendments to Oklahoma's approved environmental regulatory programs would extend to the covered areas of Indian country (without any further need for additional requests under SAFETEA).

As explained above, the EPA is proposing to disapprove the interstate visibility transport portions of the Oklahoma i-SIP submittals for the 2010 SO<sub>2</sub> and the 2012 PM<sub>2.5</sub> NAAQS because they do not meet the interstate visibility transport requirements of CAA Section 110(a)(2)(D)(i)(II) with respect to these NAAQS; however, the EPA is also proposing to make the determination that the deficiencies forming the basis of the proposed disapproval of these SIPs are met through the existing Federal Implementation Plan (FIP) in place for the Oklahoma Regional Haze program. The FIP applies to all lands within the State regardless of land status. In practice, the FIP requirements, as discussed previously, only apply to the OG&E facilities, Sooner Station Units 1 and 2, and Muskogee, Units 4 and 5.

Additionally, EPA is proposing to approve the interstate visibility transport element of the Oklahoma i-SIP for the 2015 Ozone NAAQS. Consistent with the D.C. Circuit's decision in *ODEQ v. EPA* and with EPA's October 1, 2020, SAFETEA approval, if this approval is finalized as proposed, this portion of the SIP will apply in certain areas of Indian country. Under EPA's October 1, 2020 SAFETEA approval, the SIP will apply to all Indian country within the State of Oklahoma, other than the excluded Indian country lands. Because – per the State's request under SAFETEA – EPA's October 1, 2020 approval does not displace any SIP authority previously

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<sup>76</sup> EPA's prior approvals relating to Oklahoma's SIP frequently noted that the SIP was not approved to apply in areas of Indian country (consistent with the D.C. Circuit's decision in *ODEQ v. EPA*) located in the state. *See, e.g.*, 85 Fed. Reg. 20178, 20180 (April 10, 2020). Such prior expressed limitations are superseded by the EPA's approval of Oklahoma's SAFETEA request.

exercised by the State under the CAA as interpreted in *ODEQ v. EPA*, the SIP will also apply to any Indian allotments or dependent Indian communities located outside of an Indian reservation over which there has been no demonstration of tribal authority.<sup>77</sup>

This action will not result in the imposition of new requirements for the affected sources. Rather, it proposes to approve Oklahoma's determination that the regional haze measures that have already been approved and are currently being implemented satisfy the visibility transport requirements for the 2015 Ozone NAAQS and also proposes to make the determination that the regional haze measures promulgated by EPA in the Oklahoma FIP that are currently being implemented address the deficiencies in the Oklahoma SIP with respect to visibility transport requirements for the 2010 SO<sub>2</sub> and 2012 PM<sub>2.5</sub> NAAQS.

#### **IV. Proposed Action**

We are proposing to approve the interstate visibility transport element of Oklahoma's infrastructure SIP submission for the 2015 Ozone NAAQS. We are also proposing to disapprove the interstate visibility transport elements of two SIP submissions from Oklahoma: one for the 2010 1-hour SO<sub>2</sub> NAAQS and the other for the 2012 PM<sub>2.5</sub> NAAQS. In order to address EPA's FIP obligation under section 110(c) of the Act, we are proposing to find that the deficiencies in the Oklahoma SIP that form the basis of our proposed disapproval of the interstate visibility transport portions of the Oklahoma i-SIP submissions for the 2010 SO<sub>2</sub> and 2012 PM<sub>2.5</sub> NAAQS are already addressed by the existing FIP in place for the Oklahoma Regional Haze program, and no further federal action is required.

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<sup>77</sup> In accordance with Executive Order 13990, EPA is currently reviewing our October 1, 2020 SAFETEA approval and is engaging in further consultation with tribal governments and discussions with the state of Oklahoma as part of this review. EPA also notes that the October 1, 2020 approval is the subject of a pending challenge in federal court. (*Pawnee v. Regan*, No. 20-9635 (10th Cir.)). Pending completion of EPA's review, EPA is proceeding with this proposed action in accordance with the October 1, 2020 approval. EPA's final action on the approved interstate visibility transport portion of the Oklahoma i-SIP for the 2015 Ozone NAAQS will address the scope of the state's program with respect to Indian country, and may make any appropriate adjustments, based on the status of our review at that time. If EPA's final action on Oklahoma's SIP is taken before our review of the SAFETEA approval is complete, EPA may make further changes to the approval of Oklahoma's program to reflect the outcome of the SAFETEA review.

## **V. Statutory and Executive Order Reviews**

### *A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review*

This action is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget for review.

### *B. Paperwork Reduction Act (PRA)*

This proposed action does not impose an information collection burden under the PRA because it does not contain any information collection activities.

### *C. Regulatory Flexibility Act (RFA)*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action merely proposes to disapprove a SIP submission as not meeting the CAA.

### *D. Unfunded Mandates Reform Act (UMRA)*

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments or the private sector.

### *E. Executive Order 13132: Federalism*

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

### *F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This proposal to approve the interstate visibility transport element of the Oklahoma i-SIP submission for the 2015 Ozone NAAQS and to disapprove the interstate visibility transport elements of the Oklahoma i-SIP submissions for the 2010 1-hour SO<sub>2</sub> NAAQS and the 2012 PM<sub>2.5</sub> NAAQS (and to propose a determination that no further action is required to address the deficiencies identified in the proposed disapproval) will apply, if finalized as proposed, to certain

areas of Indian country as discussed in the preamble, and therefore has tribal implications as specified in EO 13175 (65 FR 67249, November 9, 2000). However, this action will neither impose substantial direct compliance costs on federally recognized tribal governments, nor preempt tribal law. This action will not impose substantial direct compliance costs on federally recognized tribal governments because no actions will be required of tribal governments. This action will also not preempt tribal law as no Oklahoma tribe implements a regulatory program under the CAA, and thus does not have applicable or related tribal laws. Consistent with the EPA Policy on Consultation and Coordination with Indian Tribes (May 4, 2011), the EPA has offered consultation to tribal governments that may be affected by this action.

*G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks*

EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it merely proposes to disapprove a SIP submission as not meeting the CAA.

*H. Executive Order 13211, Actions that Significantly Affect Energy Supply, Distribution or Use*

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

*I. National Technology Transfer and Advancement Act*

This rulemaking does not involve technical standards.

*J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*

EPA believes the human health or environmental risk addressed by this action will not have potential disproportionately high and adverse human health or environmental effects on minority,

low-income or indigenous populations. This action merely proposes to disapprove a SIP submission as not meeting the CAA.

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Sulfur oxides, Visibility transport.

**Authority:** 42 U.S.C. 7401 *et seq.*

Dated: July 15, 2021.

**David Gray,**

*Acting Regional Administrator, Region 6.*

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